

State of Missouri

Rationale for Draft Tiered Recreational Uses 10 CSR 20-7.031(1)(C)8.



Missouri Department of Natural Resources
Water Protection and Soil Conservation Division
Water Protection Program

Rationale for *draft* Tiered Recreational Use rule at 10 CSR 20-7.031(1)(C)8.

This proposal tries to achieve these basic goals—

1. The rule must designate all classified waters within Tables G & H as whole body contact recreation.
2. Acceptable to EPA in resolving their concerns expressed in the September 8, 2000, program review regarding the absence of some waters designated for swimmable uses, wherever attainable.
3. Feasible to implement.
4. Considers varying levels of recreational use.
5. Understandable by the general public and Commission.

During stakeholder meetings, alternative approaches were suggested.

1. A tiered approach within both whole body contact (WBC) and secondary contact (SCR) recreational uses (something similar to Kansas' standards)¹.
2. A tiered approach for only WBC (something similar to EPA's guidance)².
3. Apply one standard to each use (WBC and SCR) with no subcategories of use.

Staff contemplated these issues: public versus private, accessibility, wildlife impacts, shorter recreational season for whole body contact, off-season protection, levels of use, and bacteria indicator criteria associated with recreational uses. Determining waters based on public or private land ownership and accessibility does not adequately protect recreational users. The level of use is more of the issue. For example, a water that flows through a privately-owned campground may have more frequency of use than a water that flows through a secluded area within public land. When waters are determined by the presence or absence of existing use, staff believes more adequate protection is applied. Wildlife impacts, shorter recreational season for WBC, and off-season protection have not been applied at this time. EPA no longer allows for broad exemptions due to wildlife impacts. Natural levels of bacteria can be investigated as part of a use attainability analysis (UAA). No evidence exists at this time to allow a shorter recreational season for WBC. The impact, both positive and negative, of providing protection during the non-recreational season has not been fully investigated.

Key Points.

- ? EPA guidance allows for tiered recreational uses.
- ? Any tier considered to be WBC must have a criteria based on a risk level not greater than 14 illnesses per 1000 swimmers for fresh water areas.
- ? A water body cannot be designated for SCR in lieu of WBC, if the SCR bacteria standard is greater than 14 illnesses per 1000 swimmers or 548 colonies/100mL.
- ? For WBC use to be removed, a UAA must be conducted first.
- ? The department is considering WBC and SCR to be separate recreational uses. Both uses can exist on the same water segment, and when this occurs, the highest level of protection shall apply.

¹ Kansas HB 2219.

² United States Environmental Protection Agency. *Implementation Guidance for Ambient Water Quality Criteria for Bacteria*. May 2002 Draft. EPA 823-B-02-003. Page 41.

Based on the information above, staff chose to draft a tiered approach for WBC recreational uses.

1. Category A of WBC contains those waters supporting an existing use by the general public for WBC recreation. Most of these waters are assumed to be already designated as WBC. Therefore, all waters currently designated for WBC are listed as category A. A UAA would be needed to remove Category A use or to place the water within Category B. The associated bacteria indicator criterion is 126 colonies per 100 mL (based on 8 illnesses per 1000 swimmers).
2. Category B of WBC contains all other waters. This includes those waters where WBC use is being added during this rulemaking. These waters are assumed to have no existing use since they have not been brought to the department's attention as WBC use areas. Should it be found that a water supports WBC as an existing use by the general public, it will be added to category A. The associated bacteria indicator criterion is 548 colonies per 100 mL (based on 14 illnesses per 1000 swimmers).

Category		E. coli Criterion	Illness Rate
WCR	A	126	8/1000
	B	548	14/1000
SCR		1134	9 times WBC-A
Losing Streams		126	8/1000

Draft Rule Language

(1)(C)8. Whole body contact recreation—Activities in which there is direct human contact with the raw surface water to the point of complete body submergence. The raw water may be ingested accidentally and certain sensitive body organs, such as the eyes, ears and the nose, will be exposed to the water. Although the water may be ingested accidentally, it is not intended to be used as a potable supply unless acceptable treatment is applied. Water so designated is intended to be used for swimming, water skiing or skin diving. All waters in Tables G and H of this rule are designated for whole body contact recreation. The use designation for whole body contact recreation may be removed or modified through a Use Attainability Analysis (UAA). Assignment of this use does not grant an individual the right to trespass when a land is not open to and accessible by the public through law or written permission of the landowner.

A. Category A—This category applies to those water segments that have been established by the property owner as public swimming areas allowing full and free access by the public for swimming purposes and waters with existing whole body contact recreational use(s). Examples of this category include, but are not limited to, public swimming beaches and property where whole body contact recreational activity is open to and accessible by the public through law or written permission of the landowner.

B. Category B—This category applies to waters designated for whole body contact recreation not contained within category A.

9. Secondary contact recreation—Uses include fishing, wading, commercial and recreational boating, any limited contact incidental to shoreline activities, and activities in

which users do not swim or float in the water. These recreational activities may result in contact with the water that is either incidental or accidental and the probability of ingesting appreciable quantities of water is minimal. Assignment of this use does not grant an individual the right to trespass when a land is not open to and accessible by the public through law or written permission of the landowner.

(4)(C) Bacteria. Protection of whole body contact recreation is limited to classified waters designated for that use. Either of the following bacteria criterion shall apply until a date three (3) years from the effective date of this rule; at which time, only *E. coli* criterion shall apply. The recreational season is from April 1 to October 31.

1. Fecal coliform bacteria—the fecal coliform count shall not exceed the criterion listed in Table A as a geometric mean during the recreational season in waters designated for whole body contact recreation. The fecal coliform count shall not exceed two hundred (200) colonies per one hundred milliliters (100 mL) at any time in losing streams. For waters designated for secondary contact recreation, the fecal coliform count shall not exceed one thousand eight hundred (1,800) colonies per one hundred milliliters (100 mL) as a geometric mean during the recreational season. -or-

2. *E. Coli* bacteria—the *E. coli* count shall not exceed the criterion listed in Table A as a geometric mean during the recreational season in waters designated for whole-body-contact recreation. The *E. coli* count shall not exceed one hundred twenty-six (126) colonies per one hundred milliliters (100 mL) at any time in losing streams. For waters designated for secondary contact recreation, the fecal coliform count shall not exceed one thousand one hundred thirty-four (1,134) colonies per one hundred milliliters (100 mL) as a geometric mean during the recreational season.

Table A

<u>Pollutant (colonies/100 ml)</u>	<u>WBC-A</u>	<u>WBC-B</u>	<u>SCR</u>
Fecal Coliform Bacteria *	200		1800
<i>E. coli</i> Bacteria *	126	548	1134

*Geometric mean during the recreational season in waters designated for recreation or at any time in losing streams. The recreational season is from April 1 to October 31.